2.8
3.2
3.6
4.0
2.5
2.2
2.0
100 mm
1.0
1.1
1.25
1.4
1.6
1.8
2.8
3.2
3.6
4.0
2.5
2.2
2.0
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz1234567890
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890
1.0 mm
1.5 mm
2.0 mm
A5
2.0
2.2
2.5
2.8
3.2
3.6
4.0
PG

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ABSTRACT

Focusing on phonograms and generalizations about phonics, this paper presents a comprehensive letter-sound study. The first chapter discusses the phonogram component of phonics, the Arthur Gates study of phonograms in 1928, the phonics generalizations studies of the 1960s, and the lack of a comprehensive study of the letter-sound relationship. The second chapter describes a comprehensive letter-sound study in which letter-sound relationships are noted in 16 generalizations, while chapter 3 has two parts, the first explaining the selection of the words listed in the second part, which focuses on blending short vowel sounds with single and blended consonant sounds. Chapter 4 discusses teaching automatic reading techniques--a modification of the repeated reading techniques--that will enable children to use the decoding skills they have learned to read text fluently. Appendixes include a list of parameters for the data presented in this report and a list of children's books that includes titles of both honorable mention and award-winning Caldecott and Newbery books. (EL)

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BEGINNING READING: MAKING IT WORK

Dr. Louis Gates

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Chapter 1

PHONICS AND THE MAYFLOWER MYTH

I laughed at a cartoon handed to me by my sister picturing a distinguished professor addressing a graduating class with the words: "There are many of you who never thought that you'd make it this far . . . especially those of you who can't read or write." As I thought about the caption of the cartoon I recalled a humorless incident that happened to me in my undergraduate days.

As was my custom during spring exam week, I rose at an early hour and stumbled sleepily to my desk scantily clad in Fruit-of-the-Loom briefs to do last minute cramming. I soon settled into reviewing my notes but I was jarred from my concentration by someone urgently ringing my doorbell. I grabbed an old pair of jeans that drooped over a chair and struggled to pull them up as I tripped toward the door. Half clothed, I swung the door open. On my front porch stood my next-door neighbor, Mary, thrusting toward me a crumpled paper upon which I could see barely legible scrawls. "What does this say?" she asked with perplexity

written in her eyes. Slowly I read the scrawls: "Darling Mary, I love you but I can no longer live with you. Goodby, George." Bursting into tears she sobbed, "Oh, no! He left me! He left me!"

Reasons for illiteracy, such as Mary's, stem from a variety of sources. One source is the misunderstanding that has shrouded phonics--a principal tool used for teaching beginning reading. The root of the problem with phonics can be traced back to the Mayflower.

Young children standing on the deck of this small vessel scanned the horizon for their first glimpse of the new world while they clasped their hornbooks and battledores. The most common of these listed the upper and lower case letters, pursued by isolated vowels, and then a primitive phonic lesson presented in the form of two-letter nonsense phonograms, such as ab, eb, ib, ob, ub. Later these phonograms were printed in the front of many primers, including the Protestant Tutor and the New England Primer, which served to entrench them in beginning reading programs.

Shortly after the Revolutionary War, Noah Webster, in what would later become affectionately known as the Blue-Back Speller, expanded the phonogram nonsense to patterns such as spra, spre, spri. Webster also introduced a large number of

phonic "rules" or generalizations--several of which remain popular today.

Still later Horace Mann, convinced of the superiority of the Prussian model of teaching beginning reading through sounding out letters to make words as compared to the American A-B-C-darian model of saying each letter followed by saying the word, used his powerful pen to effect change. In a few short years letter-sound phonics came to be used extensively in beginning reading curricula. Moreover, the inclusion of letter-sound phonics with phonograms and phonic generalizations completed the triangular foundation upon which modern phonic programs are built.

The trend to emphasize phonics, most notably the phonogram component of phonics, continued. Betts noted, for example, that by 1920 one program "offered almost eighteen weeks of drill on pronouncing isolated phonograms (e.g., ba, ca, da) before the child had any real idea of reading." Betts further observed that the more sensible teachers began to sarcastically label this system as the "hiss and groan" method of teaching reading.

In 1928 Gates published a study that remains the most definitive study of the long-taught and nearly sacrosanct hiss and groan nonsense. He reported that he searched more than 1200 words to determine the relative frequency of each

possible two-letter phonogram: aa, ab, ac, ad, ae, and so on. He similarly determined the frequencies of the more common three-, four-, five-, six-, and seven-letter phonograms. Eventually, some 4100 phonograms were identified of which only 167 occurred with enough frequency to warrant further study. Gates summed up his study of this final handful of phonograms as follows:

> Many [of these 167 phonograms] are of types which are not easily perceived and which are not convenient pronunciation units; many are found in words which include other elements of very low frequency of occurrence. Add to these difficulties the fact that the most frequent phonograms consist of letter combinations that have on the average two other very different sounds, and a very complex situation is revealed.

This report soured educators against using phonograms as it renewed their interest in teaching phonic generalizations. By the early 1960's the generalizations, like their predecessors, the phonograms, thoroughly cluttered basal reading manuals. Clymer, noting that the generalizations were presented in these manuals without supporting documentation, conducted the first comprehensive examination to determine their practical utility. He chose four popular manuals from which he drew over 150 phonic generalizations or "statements", including "(1) statements [that were] to be taught to the pupils, (2) statements [that were] to be derived by the pupils after inductive teaching, and (3) statements [that were presented] with no clear indication as

to what was to be done." Clymer pared this number down to forty-five which he subsequently studied in depth. The results of his study showed that only 18 of the final 45 generalizations could be used to predict letter-sound relationships with at least 75 percent accuracy. Moreover, this final cluster of generalizations were minimally useful because they represented <u>at best</u> a shotgun approach rather than a comprehensive approach to describing the letter-sound relationships of the English language.

After reading the Gates and Clymer studies, I turned to the reading literature in search of a comprehensive study of the letter-sound relationships--the third and most basic component of the triangular base of phonic instruction. To my surprise, I found that, although the phonograms and phonic generalizations were supposedly developed from justifiable letter-sound relationships, no exhaustive letter-sound examination existed upon which the phonograms and generalizations could have been built. Without this basic research it is little wonder that the phonogram and phonic generalization studies supported so little of what was being taught in the phonic component of reading programs. Moreover, it was clear that this poor showing could have been avoided if phonics had been built upon a comprehensive letter-sound study such as the one that is described in the following chapter.

Chapter 2

ENGLISH GETS NO RESPECT

> "The English have no respect for their language.... They spell it so abominably that no man can teach himself what it sounds like.... German and Spanish are accessible to foreigners; English is not accessible even to Englishmen" wrote George Bernard Shaw in the preface to volume I of Bernard Shaw: Complete Plays with Prefaces (1963).

Many people believe that the letter-sound relationships of the English language are, as Shaw described them, "abominable". However, does a careful analysis of the letter-sound relationships support the notion that these relationships are, in fact, abominable? I designed the following examination to answer this question.

My first step preparatory to conducting the examination itself was to select a suitable word list. After reviewing several lists, I choose 17,211 words from the 17,310 words originally compiled by Thorndike and Lorge and updated by Hanna and the other members of the Stanford Spelling Project. In part, I selected this list because it was a large computerized list of words actually drawn from a wide array of children's literature. Secondly, I selected the

list because the words were coded according to their relative frequency of appearance.

I began my study by organizing the various vowel letters into one of five groups: (1) R-Controlled Vowels (car), (2) Vowel Phonograms (count), (3) Adjacent Vowels (see), (4) Final Single Vowel-Consonant-E (came), and (5) Single Vowels (cat); similarly, I classified the consonants into one of three consonant groups: (1) Consonant Phonograms (action), (2) Consonant Di/Trigraphs (bath), and (3) Single Consonants (an). This is shown graphically in the phonic model found in Table 2.1.

Table 2.1

Gates Phonic Model

WORDS		
^		
^		
^		
VOWEL CATEGORIES >>>> (Always Used)	SYLLABLES	<<<< CONSONANT CATEGORIES (Used with Vowels)
Options		Options
--R-Controlled Vowels --Vowel Phonograms --Final Vowel-Consonant-E --Adjacent Vowels --Single Vowels		--Consonant Phonograms --Consonant Di/Trigraphs --Single Consonants (Including Blends)

This model, which embraces virtually all of the letter combinations in the English language, suggests that words

are made of syllables and that syllables are made of one of the five various vowel options combined with, when used, one or more of the three consonant options. I excluded from my study the r-controlled vowel option because it has been studied in depth elsewhere. However, each of the other vowel and consonant options found in Table 2.1 were analyzed according to the parameters that I established for the computer assisted study (see the parameters in Appendix 1). Results of my examination are listed in Table 2.2. (It is important to note that the letter units are intended to be used in the order of their appearance in the table).

Table 2.2

Letter-Sound Relationships of
Various Letter Units

Phonic Units	Examples(s)*	Total Corpus Conformations/ Total Words with the Combination	%
	Final Single Vowel-Consonant-E		
-ACE	pace/palace	36/37	97
-AGE	page/average	105/114	92
-ATE	date/private	448/448	100
-A-Con-E	base	223/230	97
-E-Con-E	these	58/68	85
-ICE	nice/notice	52/55	95
-ILE	unpredictable	59 words	--
-INE	unpredictable	118 words	--
-SIVE	massive	51/51	100
-TIVE	native	131/131	100
-I-Con-E	like	391/422	93
-OVE	unpredictable	24 words	--
-SOME	handsome	22/23	96
-O-Con-E	hole	219/243	90
-U-Con-E	use/rule	180/188	96

Table 2.2 (Continued)

Phonic Units	Examples(s)*	Total Corpus Conformations/ Total Words with the Combination	%
	Adjacent Vowels		
AI	fail	227/262	87
AU	autumn	154/169	91
AY	day	121/123	98
EAL (except -ealth)	deal/realize	48/58	83
EA	beat/head	398/449	89
EE	see	257/263	98
CIA (except -ciate)	special	54/56	96
-IATE	deviate/opiate	36/37	97
IA	unpredictable	248 words	--
-IE (one syllable word)	tie	11/11	100
IEN	unpredictable	82 words	--
IET	diet	14/15	93
IE	brief	73/82	89
ION	action	938/982	96
IO	unpredictable	83 words	--
OA	boat	98/111	88
OI	join	99/108	92
FOOT (root)	foot	17/17	100
OOD	unpredictable	69 words	--
OOK	book	33/34	97
OO	moon	174/186	94
OUN	count	103/109	94
-OUS	famous	145/146	99
OUSE	douse/rouse	43/44	98
OU	unpredictable	219 words	--
OW	blow/town	193/197	98

Table 2.2 (Continued)

Phonic Units	Examples(s)*	Total Corpus Conformations/ Total Words with the Combination	%
	Single Vowels		
ALL (one syllable root)	ball	38/39	97
ATION	nation	431/442	98
WA	unpredictable	76 words	--
A	act/about	4054/4515	90
-E	dance	571/586	97
E (excluding final e, except -Con-L-E)	end/pretty/happen	4975/5389	92
IGHT	night	78/80	98
I (except ight)	big/animal	5653/5959	95
O	unpredictable	3562 words	--
U-Con-Vow	music/numerous/ popular	724/882	82
U (except U-Con-Vow)	cup/supply	1468/1549	95
Y (medial)	unpredictable	307 words	--
-FY	defy	61/65	94
-Y (one syllable)	by	17/17	100
-Y	happy	1593/1608	99
	Consonant Related Phonograms		
CIOUS	precious	40/40	100
SION	pension/vision	136/136	100
TION	action	772/784	98
TIOUS	ambitious	23/23	100

Table 2.2 (Continued)

Phonic Units	Examples(s)*	Total Corpus Conformations/ Total Words with the Combination	%
	Consonant Di/Trigraphs		
CH	church/ache	528/568	93
CK	back	296/297	99
DG	judge	57/57	100
GHT	night	128/128	100
GH (except GHT)	unpredictable	50 words	--
-GN	sign	18/18	100
KN	knife	35/38	92
NG	along/strange	550/583	94
PH	phase	229/230	99
SH	ship	403/404	99
TCH	hatch	63/64	98
TH	both/although	552/561	98
WH (except who whole, and inflections)	which	91/93	
WR	wrench	49/49	100
	Single Consonants		
B	bib	2246/2280	99
Cia	special	63/69	91
Ce, Ci, Cy (except cia)	city	1299/1311	99
C (hard)	cup	3344/3349	99
D	deed	3562/3636	98
F	find	1755/1758	99
Ge	age	373/422	88
Gi	magic	156/187	83
Gy	energy	82/82	100
G (hard)	go	1049/1056	99
H	hat	724/786	92
J	jug	233/233	100
K	kiss	621/621	100
L	lid	5791/5825	99
M	mit	1343/1343	100
N	not	6496/6503	99
P	pop	3267/3296	99
Qu	queen, liquor	258/258	100
R	roar	8320/8323	99

Table 2.2 (Continued)

Phonic Units	Examples(s)*	Total Corpus Conformations/ Total Words with the Combination	%
S	see, easy	5375/5453	99
Tia	initial	44/48	92
Tu	turn, nature	370/370	100
T (except tia and tu)	tot	6402/6458	100
V	valve	1476/1476	100
W	with	529/540	98
X	tax, example	644/654	98
Y	yard	53/54	98
Z	zebra	255/267	96

*The American Heritage Dictionary (1979) was used as the pronunciation reference.

The results of my study, which are tabulated in Table 2.2, show that all but twelve of the 102 identified letter units are highly predictable. (Moreover, notice that the single vowel o accounts for 73 percent of these unpredictable situations [3562/4897]). The various letter units found in Table 2.2 are reorganized in Table 2.3. This reorganization shows that it is these twelve letter groups which significantly lower the overall phonic predictability of the English language. Placing these twelve letter units aside enables one to predetermine the remaining letter-sound relationships with the almost unbelievable accuracy of 97 percent.

The data listed in Table 2.2 is generalized in Table 2.4. The r-controlled generalization found in Table 2.4 was developed by combining the data discovered by previous

researchers; the remaining generalizations were synthesized from the data reported in the present study. (The generalizations in Table 2.4, like the data presented in Table 2.2, are intended to be used in the order in which they are presented).

Table 2.3

Combined Phonic Predictability of the Letter Units

	Total of Words in Each Category Including Unpredictable Word Groups	%	Total of Words in Each Cate- Excluding Unpredictable Word Groups	%
Adjacent Vowels	3236/4160	78	3236/3459	94
-VCe	1916/2211	87	1916/2010	95
Single Vowels	19,663/25,076	78	19,663/21,131	93
Vowel Totals	24,815/31,447	79	24,815/26,600	93
Consonant Phonograms	971/983	99	971/983	99
Consonant Di/Trigraphs	2999/3140	96	2999/3090	97
Single Consonants	56,130/56,658	99	56,130/56,658	99
Consonant Totals	60,100/60,781	99	60,100/60,731	99
GRAND TOTAL	84,915/92,228	92	84,915/87,331	97

As a group these sixteen generalizations comprehensively describe the letter-sound relationships of the English language. However, these sixteen generalizations were

included for descriptive purposes and were not intended to be taught to beginning readers. This is because, as a whole, beginning readers find it more useful to learn actual groups of words that phonic generalizations umbrella and not the generalizations themselves. With this in mind, the letter-sound relationships noted in the sixteen generalizations are transformed into the word groups found in the following chapter.

Table 2.4

Phonic Generalizations Relating to all Major Letter Relationships in the English Language

---

R-Controlled Vowels

The r gives the immediately preceding vowel(s) a sound that is neither long or short.

Final Vowel-Consonant-E

When a word ends in a single vowel-consonant-e, the final e is silent and the vowel is long or has the short i sound, except -some as in handsome, and the unpredictable combinations -ile, -ine , and -ove.

Adjacent Vowels

The following phonograms usually have either one of two sounds: eal (except ealth) as in deal or realize, -iate as in deviate or opiate, and ouse as in douse or rouse; while the following phonograms usually have one sound: cia (except -ciate) as in special, foot which is a root word, iet as in diet, ion as in action, ook as in book, oun as in count, and -ous as in famous.

Table 2.4 (Continued)

The phonograms ien and ood and the following adjacent vowels are unpredictable: ia (except -iate and cia), io (except ion), and ou (except ouse, -oun, and -ous).

The following pairs usually have either one of two sounds: ea as in beat or head and ow as in blow or town; while the following pairs generally have one sound: ai as in fail, au as in autumn, ay as in day, ee as in see, final ie in one syllable words like tie, other ie vowel pairs as in field, oa as in boat, oo as in moon, and oi as in join.

Single Vowels

A single vowel a or i usually has either its short sound or becomes schwa, except -all in one syllable words like ball, -ation as in nation, wa which is unpredictable, and -igh as in night.

A final single vowel e is silent except final consonant-l-e.

A single e usually has its short sound or gets reduced to schwa or short i, accept final consonant+l+e as in uncle, otherwise except final e.

A single vowel o is unpredictable.

A single vowel u in a u+consonant+vowel series usually has a sound heard in music, numerous, or popular; otherwise it usually has its short sound or gets reduced to schwa.

A single vowel y that does not end a word is unpredictable.

A final single vowel y that ends a one syllable word or ends a word preceded by f usually has the long i sound as in by or defy; otherwise, a final single vowel y usually has the sound heard in happy.

Consonant Generalizations

Either one of two sounds is usually heard for the phonogram sion as in pension or vision while a single sound is usually heard for the phonograms cious, tion, and tious as in precious, action, and ambitious respectively.

Table 2.4 (Continued)

Either one of two sounds is usually heard for the digraphs ch, dg, and th while a single sound is usually heard for the other di/trigraphs which include ck, dg, ght, -gn, kn, ph, sh, tch, wh, and wr (except the unpredictable digraph gh and the words who, whole, and their inflections).

Either one of two sounds or set of sounds is usually heard for the single consonants g, s, and x while a single sound is usually heard for the remaining single consonants (except the special sounds of c or g followed by e, i, or y; c or t followed by ai; and t followed by u).

Chapter 3: Part 1

FATHERS, DO NOT TEACH YOUR DAUGHTERS

> [My first grade teacher, Miss Caroline] went to the blackboard and printed the alphabet in enormous square capitals, turned to the class and asked, "Does anybody know what these are?"
>
> Everybody did; most of the class had failed it last year.
>
> I suppose she chose me because she knew my name; as I read the alphabet a faint line appeared between her eyebrows, and after making me read most of My First Reader and the stock market quotations from Mobile Register aloud, she discovered that I was literate and looked at me with more than faint distaste. Miss Caroline told me to tell my father not to teach me any more, it would interfere with my reading....
>
> ...Now you tell your father not to teach you anymore. It is best to begin with a fresh mind. You tell him I'll take over from here and try to undo the damage. (Harper Lee, To Kill a Mockingbird).

Unlike the teaching methods used by Miss Caroline who forced her students to progress methodically through all of the preplanned beginning reading exercises irrespective of their ability, those who have mastered basic reading skills should be freed to learn more advanced reading skills. However, those lacking these skills need to learn to break the code as simply and as quickly as possible. The word sheets,

which are included at the end of this chapter, are designed to accomplish the greater portion of this task.

Each word in the word sheets occurs frequently (as determined by the frequency count given to each word in the Stanford word list) except the word lists where few high-frequency words were found. These include the au, kn, and wr lists as well as the -Cle syllabication sheet. In addition, all the words found in the word lists have predictable letter combinations except for the inclusion of the unpredictable single vowel o. Because this vowel is the only unpredictable letter or letter pattern to occur with great regularity it was decided to include it in some of the one syllable word lists in order to give the beginning reader a sense of the one major sound of a range of sounds that this vowel may represent. The single vowel o does not reappear, however, in the syllabication word lists. It is also worth mentioning that, although the letter r immediately following single or paired vowels usually modifies the sounds of the vowels, the actual pronunciation of the r-controlled cannot be generalized because they vary widely from one dialetical region to another. Accordingly, vowels followed by an r were excluded from the word lists.

Furthermore, the word lists include virtually all of the concepts identified in Table 2.2 of the previous chapter. In keeping with the general outline of this table, the lists

are organized into six groups: (1) Short Vowels with Single/Blended Consonants, (2) One Syllable -VCE Words, (3) Adjacent Vowels, (4) Consonant Di/Trigraphs, (5) Selected Single Vowel Phonograms, and (6) Syllabication. The one syllable word lists, which include all of the lists except those introduced under syllabication, were developed so that the phonic elements to be introduced are the major focus of the sheet. This was done, for example, by including single consonants in the adjacent vowel word sheets (see and seem) as opposed to introducing the adjacent vowels along with more complex consonant combinations (street or speech). The one syllable word sheets are followed by syllabication sheets that were designed, on the other hand, to introduce a variety of more complex letter combinations.

Typically, early beginning readers will need to be introduced to all of the word sheets. However, the ability of more advanced beginning readers and of the minimally capable but reading disabled should be tested to determine which of the word sheets they have already mastered and which they need to learn. This can be easily determined by noting the skill of the students as they read a few words from each word sheet.

Once the appropriate word sheets are selected, it will be helpful to occasionally teach the one syllable word sheets by having the students "sound out the words". However,

sounding out the words frequently leads to slow word calling in which the proper pronunciation of the word cat, for example, becomes grossly mispronounced as cu-a-tu. In most cases a more satisfying result will be achieved if sounding out is replaced by a teacher (or a mechanical or computerized "reader") who reads and rereads the group of words that are to be learned while the beginning readers visually follow along parroting the words. Beginning readers who are taught the words in the lists using this technique will soon pass beyond parroting to unassisted fluent reading of the words. This technique, which takes the beginning readers away from slowly sounding out words, may appear at first glance to be "too simple"; however, the technique employs strategies similar to those employed in repeated reading strategies--simple but useful techniques described in the following chapter. Moreover, beginning readers using this technique will, like mature readers, learn to spontaneously apply the phonic skills that were carefully built into the word sheets.

Similar teaching techniques can be employed for teaching the syllabication sheets. However, additional practice is usually needed to help insure retention. The likelihood of long term retention can be improved, for example, by having the beginning readers practice each group of words until

they can read them rapidly in either descending or ascending order.

Beginning readers who have mastered all of the sheets will have acquired the major tools needed for accurate decoding. Of course, learning the phonic word lists will not produce fluent readers like teaching one to visually read the notes in a musical score will not produce music. Rather, the skills learned in the word lists must be actively applied. Suggestions for applying the words to textual reading are found in the following chapter.

Chapter 3: Part 2

THE WORD LISTS

Short Vowels with Single/Blended Consonants

The purpose of these word sheets is to introduce beginning readers to blending short vowel sounds with single and blended consonant sounds. The first five word sheets introduce CVC words (cat). Double consonants, such as ll (bell) and the consonant digraph ck (duck), are also treated as single consonants in these and other word sheets. The first five word sheets are followed by a sheet that introduces final consonant blends and the digraph ng. A sheet introducing the initial blends completes this section.

SHORT A

1. bad
2. dad
3. had
4. lad
5. mad
6. pad
7. sad

8. can
9. fan
10. man
11. pan
12. ran
13. tan
14. van

15. cap
16. gap
17. lap
18. map
19. nap
20. rap
21. sap
22. tap

23. bat
24. cat
25. fat
26. hat
27. mat
28. pat
29. rat
30. sat

SHORT E

1. bell
2. dell
3. fell
4. sell
5. tell
6. well
7. yell

8. den
9. hen
10. men
11. pen
12. ten

13. bet
14. get
15 let
16 met
17. net
18. pet
19. set
20. wet
21. yet

SHORT I

1. bid
2. did
3. hid
4. kid
5. lid
6. mid
7. rid

8. big
9. dig
10. fig
11. pig
12. wig

13. bill
14. fill
15. hill
16. kill
17. mill
18. till
19. will

20. din
21. kin
22. pin
23. sin
24. tin
25. win

26. dip
27. hip
28. lip
29. rip
30. tip

31. bit
32. fit
33. hit
34. kit
35. lit
36. pit
37. sit
39. wit

SHORT O

1. bob
2. job
3. mob
4. rob
5. sob

6. dock
7. lock
8. mock
9. rock
10. sock

11. cod
12. god
13. nod
14. rod
15. sod

16. cot
17. dot
18. got
19. hot
20. lot
21. not
22. pot

SHORT U

1. bug
2. dug
3. hug
4. rug
5. tug

6. buck
7. duck
8. luck
9. suck
10. tuck

11. fun
12. gun
13. run
14. sun

15. cub
16. rub
17. tub

18. gum
19. hum
20. sum

21. but
22. cut
23. nut

24. bull
25. dull
26. lull

FINAL CONSONANT BLENDS

1. belt
2. felt
3. melt
4. tilt
5. wilt

6. bank
7. rank
8. sank
9. tank
10. ink
11. link
12. pink
13. sink
14. wink
15. zink
16. sunk

17. and
18. band
19. hand
20. land
21. sand
22. end
23. bend
24. lend
25. mend
26. send
27. tend
28. wind
29. bond
30. fond
31. pond
32. fund

33. bang
34. gang
35. hang
36. rang
37. sang
38. king
39. ring
40. sing
41. wing
42. long
43. song
44. hung
45. lung
46. sung

47. ant
48. pant
49. bent
50. lent
51. rent
52. sent
53. tent
54. went
55. hint
56. mint
57. tint
58. hunt

59. lamp
60. limp
61. pomp
62. dump
63. jump
64. lump
65. pump

66. fast
67. last
68. mast
69. past
70. vast
71. best
72. jest
73. lest
74. nest
75. rest
76. test
77. vest
78. west
79. fist
80. list
81. mist
82. cost
83. lost
84. bust
85. dust
86. just
87. must
88. rust

89. mask
90. task
91. desk
92. risk
93. dusk

INITIAL CONSONANT BLENDS

1. bless
2. bliss
3. block
4. blot
5. bluff

6. clad
7. clap
8. class
9. click
10. cliff
11. clip
12. clock
13. club
14. cluck

15. drag
16. dress
17. drill
18. drip
19. drop
20. drug
21. drum

22. flag
23. flap
24. flat
25. flax
26. fled
27. flit
28. flock

29. grab
30. grass
31. grim
32. grin
33. grip
34. grub

35. plan
36. plot
37. pluck
38. plum
39. plus

40. skill
41. skin
42. skim
43. skip
44. skull

45. slam
46. slap
47. slid
48. slim
49. slip

50. span
51. speck
52. sped
53. spell
54. spill
55. spin
56. spit
57. spot
58. spun

59. stack
60. staff
61. stem
62. step
63. stick
64. stiff
65. still
66. stock
67. stop
68. stub
69. stuck
70. stuff

71. track
72. trap
73. trick
74. trim
75. trip
76. trod
77. trot
78. truck

One Syllable -VCE Words

It is recalled that the final single vowel-consonant-e (-VCE) generalization reads as follows:

> When a word ends in a single vowel-consonant-e, the final e is silent and the vowel is long or has the short i sound, except -some (handsome), and the unpredictable combinations -ile, -ine , and -ove.

The simplest level of words that apply to this generalization, which includes four-letter words ending in a long a-, i-, or o-Consonant-e, are found in these sheets. The phonogram -some and words where the short i sound is heard in place of a long vowel sound are introduced in the syllabication sheets.

FINAL A-CONSONANT-E

1. ate
2. date
3. fate
4. gate
5. hate
6. late
7. mate
8. rate

9. bake
10. cake
11. lake
12. make
13. rake
14. sake
15. take
16. wake

17. came
18. dame
19. fame
20. game
21. lame
22. name
23. same
24. tame

25. cane
26. lane
27. mane
28. pane
29 sane

30. cave
31. gave
32 pave
33. save
34. wave

35. bade
36. fade
37. made
38. wade

39. male
40. pale
41. sale
42. tale

43. base
44. case
45. vase

46. daze
47. gaze

48. babe

49. safe

50. cape

FINAL I-CONSONANT-E

1. dine
2. line
3. fine
4. mine
5. nine
6. pine
7. vine
8. wine
9. hide
10. ride
11. side
12. tide
13. wide
14. file
15. mile
16. pile
17. tile
18. vile
19. bite
20 kite
21 rite
22 site
23. dime
24. lime
25. time
26. pipe
27. ripe
28. wipe
29. dive
30. hive
31. live
32. life
33. wife
34. like
35. size

FINAL O-CONSONANT-E

1. hole
2. mole
3. pole
4. sole
5. code
6. mode
7. rode
8. joke
9. poke
10. woke
11. bone
12. tone
13. zone
14. cope
15. hope
16. rope
17. dome
18. home
19. note
20. vote
21. dove
22. rove

Adjacent Vowels

The following adjacent vowel combinations were excepted from the accompanying word lists: (1) the phonogram _ouse_ because many of the representative words are homonyms and therefore their appropriate pronunciation can be determined only in context (compare, for example, _house_ as a noun with _house_ as a verb); (2) the phonograms -_iate_ and -_ous_ along with the vowel pair _ie_ because few exemplary high-frequency words were found for these combinations; and (3) the phonogram _cia_ which is introduced in the syllabication sheets. All of the other vowel combinations that were listed in Chapter 2 are found in the following pages.

1. fail
2. hail
3. jail
4. mail
5. nail
6. pail
7. rail
8. sail
9. tail
10. wail
11. fain
12. gain
13. main
14. pain
15. rain
16. vain
17. laid
18. maid
19. paid
20. raid
21. bait
22. wait

AU

1. haul
2. maul
3. daub
4. laud
5. faun
6. taut

AW

1. jaw
2. law
3. paw
4. raw
5. saw
6. dawn
7. fawn
8. hawk
9. lawn
10. yawn

AY

1. bay
2. day
3. gay
4. hay
5. jay
6. lay
7. may
8. nay
9. pay
10. ray
11. say
12. way

EA

1. eat
2. beat
3. feat
4. heat
5. meat
6. neat
7. seat
8. pea
9. sea
10. tea
11. bead
12. lead
13. mead
14. read
15. bean
16. dean
17. jean
18. lean
19. mean
20. beak
21. peak
22. weak
23. beam
24. seam
25. team
26. heap
27. leap
28. reap
29. leaf
30. deal
31. heal
32. meal
33. real
34. seal
35. zeal
36. dead
37. head
38. lead
39. read
40. deaf

EE

1. bee
2. fee
3. see
4. wee
5. deed
6. feed
7. heed
8. need
9. reed
10. seed
11. weed
12. feel
13. heel
14. peel
15. reel
16. deep
17. keep
18. peep
19. weep
20. seek
21. week
22. deem
23. seem
24. keen
25. seen
26. feet
27. meet

1. oat
2. boat
3. coat
4. goat
5. load
6. road
7. toad
8. oak
9. soak
10. coal
11. goal
12. foam
13. roam
14. loan
15. moan
16. loaf
17. soap
18. coax

OI

1. oil
2. boil
3. coil
4. soil
5. toil
6. coin
7. join
8. void

1. book
2. cook
3. hook
4. look
5. took

6. too
7. woo
8. cool
9. fool
10. pool
11. tool
12. wool
13. boon
14. coon
15. moon
16. noon
17. soon
18. doom
19. loom
20. room
21. hoof
22. roof
23. boot
24. root
25. loop

26. foot

27. good
28. hood
39. wood
30. food
31. mood

OUN

1. bound
2. found
3. hound
4. mound
5. pound
6. round
7. sound
8. wound
9. count

ow

1. low
2. row
3. own
4. sown
5. bowl

6. cow
7. how
8. now
9. vow
10. down
11. gown
12. town
13. owl
14. howl

Consonant Di/trigraphs

The consonant di/trigraph generalization, it is recalled, reads as follows:

> Either one of two sounds is usually heard for the digraphs ch, ng, and th while a single sound is usually heard for the other di/trigraphs which include ck, dg, ght, -gn, kn, ph, sh, tch, wh, and wr (except the unpredictable digraph gh and the words who, whole, and their inflections).

The unpredictable digraph gh is, of course, excluded from these di/trigraph word sheets. The /k/ sound of ch (ache) and the digraph -gn (sign) are alike excluded because they occur infrequently. The digraphs ng and ck have already been introduced while the trigraph ght will appear in the special single vowel sheets and the ph digraph will appear in syllabication sheets. The remaining digraphs that are listed in the above generalization appear in following word sheets.

1. chap
2. chip
3. chop
4. check
5. chick
6. chat
7. chill
8. chin
9. much
10. rich
11. such

-DGE

1. edge
2. hedge
3. ledge
4. wedge
5. dodge
6. lodge
7. ridge
8. judge

KN

1. knob
2. knock
3. knot
4. knack
5. knell
6. knit

SH

1. shed
2. ship
3. shop
4. shot
5. shut
6. shun
7. ash
8. dash
9. cash
10. lash
11. sash
12. dish
13. fish
14. wish
15. hush
16. rush

TCH

1. catch
2. hatch
3. match
4. patch
5. ditch
6. pitch
7. witch
8. fetch
9. notch

TH

1. bath
2. path
3. with
4. thin
5. thick

6. than
7. that
8. them
9. then
10. this
11. thus

1. whiff
2. whim
3. whip
4. whit
5. whiz
6. when
7. whet
8. whack
9. who
10. whole

WH

1. wrap
2. wrack
3. wreck
4. wren
5. writ

Special Single Vowels

Three of the five predictable single vowel phonograms are found in these sheets: -all (ball), -ight (night), and y when it ends a one syllable word (by). The other two predictable single vowel phonograms, -fy and ation, are included in the syllabication sheets.

ALL (One Syllable Roots)

1. all
2. ball
3. call
4. fall
5. hall
6. tall
7. wall

IGHT

1. fight
2. light
3. might
4. night
5. right
6. sight
7. tight

-Y (One Syllable Words)

1. by
2. my
3. cry
4. dry
5. fry
6. try
7. fly
8. ply
9. sly
10. sky
11. spy

Syllabication

The syllabication sheets are designed to combine a variety of phonic concepts. Introduced in the first of the five syllabication sheets are simple two syllable words (happen). The schwa sound (husband), y ending two or more syllable words (happy, except fy), and the /z/ sound for s (visit) are also introduced in this sheet. Final Consonant-l-e (apple) is introduced in the second sheet. A number of new concepts are introduced in the two syllable words found in the third sheet, including the consonant phonogram tion (action); the single vowel phonogram -ation (nation); the single vowel u-consonant-vowel letter pattern (duty); the phonogram cia (special); the soft sounds of c and g (city, age); the root stem some (handsome); and final single -VCE where the vowel has a short i sound (passage). Three and four syllable words are introduced in the fourth and final syllabication sheet along with the phonograms fy (justify) and sion (expression) and the consonant digraph ph (telephone).

TWO SYLLABLE WORDS: Level 1

1. address
2. admit
3. affect
4. angry
5. attack
6. attempt
7. attend
8. basket
9. cabin
10. devil
11. distant
12. district
13. empty
14. exist
15. expect
16. express
17. extend
18. fifty
19. filling
20. funny
21. habit
22. happen
23. happy
24. himself
25. husband
26. insist
27. instant
28. intend
29. itself
30. level
31. metal
32. present
33. public
34. subject
35. sudden
36. ticket
37. twenty
38. unless
39. until
40. vessel
41. visit
42. within
43. witness
44. travel

-CONSONANT-L-E

1. battle
2. cattle
3. rattle
4. kettle
5. settle
6. little
7. bottle
8. paddle
9. meddle
10. middle
11. huddle
12. tackle
13. pickle
14. dazzle
15. puzzle
16. apple
17. ripple
18. pebble
19. bubble
20. ruffle

TWO SYLLABLE WORDS: Level 2

1. duty
2. human
3. music
4. action
5. mention
6. nation
7. station
8. special
9. handsome
10. accept
11. except
12. success
13. advance
14. distance
15. city
16. suggest
17. gentle
18. passage
19. village
20. practice

THREE & FOUR SYLLABLE WORDS

1. animal
2. benefit
3. capital
4. citizen
5. family
6. addition
7. necessity
8. telephone
9. accident
10. activity
11. advantage
12. attention
13. attitude
14. difficult
15. difficulty
16. element
17. establish
18. evidence
19. exactly
20. example
21. excellent
22. expression
23. foundation
24. indicate
25. industry
26. justify
27. practical
28. president
29. principal
30. principle
31. sacrifice
32. satisfy
33. successful

Chapter 4

PUTTING IT ALL TOGETHER

> To decode words automatically means to decode them quickly but it also means to decode them without thinking about it. During fluent reading, the decoding aspects of the reading process are handled by an "automatic pilot," leaving the mind free to spend all of its attention on the meaning. It's a little like when someone first learns to drive a car. When trying to use the brake without jerking the car, at the same instant that the steering wheel is to be turned to round a corner, at the same instant that the gears must be shifted into second, it is easy to make mistakes or at least to become nervous and frustrated." (Cunningham, 1979).

Mature readers, who approach text with little thought of decoding individual words, place the majority of their energy on comprehension activities. Beginning readers, on the other hand, focus so much energy upon decoding that little is left for comprehension. However, they can be taught automatic reading techniques that will enable them to use the decoding skills they have learned and to automatically apply these to read text fluently. Once automaticity is learned, beginning readers will be freed, like mature readers, to focus their energies upon comprehension.

The major approaches to teaching beginning readers to automatically decode are generally labeled as various modifications of the repeated reading technique. The essence of this technique was ably described by Wayne Otto (1985) as follows:

> In its purest form, the technique is the essence of simplicity: The learner rereads a short, meaningful passage as many times as it takes to reach a satisfactory level of fluency. In practice, the learner selects easy-to-read 50 to 200 word passages and, ordinarily, reads a passage three or four times, with the teacher reporting accuracy, rate, and speed after each reading. Variations have been suggested, like starting with a teacher-modeled fluent reading of the passage or having the learner "echo" the teacher's reading or having the learner work with a tape recorder; but the expectation of improved reading fluency, speed and comprehension is the same.

Typically basal readers are used to reinforce various reading skills including repeated reading ones. However, this reinforcement should not be limited to basals but it should also come from other sources such as trade books. Appendix 2 was included for those seeking a springboard to suggested titles of trade books that can be used as reinforcement. In part, this list includes titles of both the honorable mention and the award-winning Caldecott and Newbery books. These books were selected because, in addition to representing quality children's literature, they are readily available. Few of these books, however, were written at a first or second grade readability. Therefore,

additional titles with estimated first and second grade readabilities were listed from the Random House Beginner Level, the Harper Early I Can Read, and the Harper I Can Read collections.

Although there are a number of ways of introducing beginning readers to books with appropriate readabilities, one of the easiest ways is to code the spines of books of a similar readability with a unique color of plastic or cloth tape. The students can be instructed to choose a reinforcement book from any book that is coded within their estimated readability range. Moreover, as their skills develop they can be directed toward books with more challenging readabilities.

In summary, mastery of the highly predictable letter-sound relationships is of limited value unless beginning readers are, as they should be, encouraged to read widely and to apply the word attack tools they acquire. On the other hand, beginning readers are often incapable of reading text unless they are shown how to break the code. Learning the phonic word lists found in this text and applying this knowledge to active reading will go a long way toward freeing beginning readers from basic word attack. Moreover, once freed from concentrating upon decoding they can focus their energies upon advanced reading activities.

ANNOTATED BIBLIOGRAPHY

Anderson, Richard, ed. Becoming a Nation of Readers: The Report of the Commission on Reading. Washington D.C.: National Institute of Education, 1985.

It is unlikely that any reading report in the 1980's will generate as much interest as this report will generate. Among a large number of recommendations is the recommendation that children should receive rapid and intensive instruction in phonics. However, the authors of the report left the components of phonics instruction unidentified--a task accomplished in the present report.

Betts, Emmett Albert. "What about Phonics?" Education, (May, 1955), 547-59.

Betts, who was mentioned in the present report, described the nonsense of using what he called the "hiss and groan" or "grunt and groan" phonics that was taught in the 1920's.

Bond, Guy L. and Robert Dykstra. "The Comparative Research Program in First-Grade Reading Instruction." Reading Research Quarterly, (Summer, 1967), 4-142.

This report, which remains as one of the most comprehensive studies to date as it relates to beginning reading, evaluated the relative success of various instructional approaches, including Basal, Basal plus Phonics, i.t.a., Linguistic, Language Experience, and Phonic/Linguistic. In part, the authors found that an analysis of the various approaches showed "correlations between the Word Reading test and the Gates test varied from .74 to .86. Furthermore, the Gates and Fry lists correlated between .75 and .92 with each other." Looking at these data led the authors to write that "evidently, a child who can read phonetically regular words can also read high frequency words..." (pp. 41-43). These findings seem to align with the present author's observations of beginning readers who after learning the words in word lists found in this report showed few problems with learning to read phonetically irregular words that were met as they applied their skills to text. Bond and Dykstra also concluded that "word study skills must be emphasized and taught systematically regardless of what approach to initial reading instruction is used" (p. 122). However, the

word study lessons have not been built upon comprehensive research of letter-sound relationships that, if incorporated into the lessons, would strengthen them.

Burmeister, Lou E. "Selected Word Analysis Generalizations for a Group Approach to Corrective Reading in the Secondary School." Reading Research Quarterly, (Fall, 1968), 71-95.

Among a number of findings, Burmeister discovered, that the traditionally taught generalization, "a single vowel in a open syllable has a long sound," was efficient in less than a third of the words she examined. Therefore she suggested that a single vowel in a open syllable, like one in a closed syllable, is usually short. However, she stopped short of giving conclusive statistical support for her proposal. Nevertheless, this notion led the present author to discover a great amount of phonic regularity for the single vowels regardless of syllabic position. This discovery effectively removed the need to determine whether a single vowel in a syllable was open or closed before attempting to decode a word and, accordingly, simplified the understanding of the decoding task of one of the most confusing aspects of letter-sound relationships.

_____. "Vowel Pairs." The Reading Teacher, (February, 1968), 445-52.

Burmeister examined sixteen vowel pairs in depth and demonstrated that these pairs should be examined individually rather than as a group. In addition, her study was one of the first to show that an r following a vowel pair influences the sound of the pair in a manner similar to that of an r following a single vowel.

Clymer, Theodore. "The Utility of Phonic Generalizations in the Primary Grades." The Reading Teacher, (January, 1963), 252-58.

Clymer's pioneer generalization study showed many of the most popular generalizations to be suspect, including many of those that had been popular since they were first introduced by Noah Webster.

Cunningham, James W. "An automatic Pilot for Decoding." The Reading Teacher, (January, 1979), 420-424.

Cunningham, who was cited in the introduction to fourth chapter of the current text, is worthwhile reading for

those interested in tracing the history of repeated reading and related techniques.

Curry, Robert L. and Lynna Geis. A Summary of Studies on the Usefulness of Phonic Generalizations ERIC Document ED 132 560, 1976.

Curry and Geis compared the data that Clymer discovered with six similar reports. One of their conclusions was that even the generalizations that were efficient should be combined and further refined before they could be used efficiently.

Forell, Elizabeth R. "The Case for Conservative Reader Placement." The Reading Teacher, (May, 1985), 857-862.

In addition to finding that "'comfortable' reader placement" reduces frustration and allows for "normal reading development," Forell noted that the "basal readers designated for the grade level were appropriate for only the top half of the children in the study, while the rest of the children needed readers 1 to 3 years below grade level." In keeping with the tone of this article, it is the present author's opinion that these lower students will often benefit from intensive practice in applying their decoding skills by using a variety of reading materials, especially through using trade books that are matched to their independent and instructional reading levels.

Gates, Arthur I. New Methods in Primary Reading. New York: Teachers College, Columbia University, 1928.

Gates examined a large number of traditional phonograms that had been taught, including many that were first introduced to the American colonies. He found that many of these phonograms were "not easily perceived," were "not convenient pronunciation units," and were "found in words which include other elements of very low frequency of occurrence. Add to these difficulties the fact that the most frequent phonograms consist of letter combinations that have on the average two very different sounds, and a very complex situation is revealed." These findings effectively rang the death knell for teaching traditional phonogram nonsense.

Gates, Louis and Heath Lowry. "A Face Lift for the Silent E." The Reading Teacher, (October, 1983), 102-03.

The traditional phonic generalization, "When a word ends in a single vowel+consonant+e the e is silent and the

vowel is long," was shown to be inefficient. However, its efficiency could be increased to over 90 percent if the generalization is modified as follows: "When a word ends in a single vowel+consonant+e the e is silent and the vowel is long or has the short i sound (except words ending in -some, -ove, and -vowel-r-e).

Gates, Louis. "Good Generalizations for Decoding Single Vowels." The Reading Teacher, (February, 1985), 587.

The article offers suggestions for combining and improving the overall utility of the single vowel generalizations.

_____. "Phonic Fitness of Selected Grapheme-Phoneme Correspondence, Phonograms, and Phonic Generalizations." Unpublished doctoral dissertation, University of the Pacific, 1981.

This technical study includes a historical review of phonic programs, provides the first comprehensive statistical data that demonstrates that English has a great amount of phonic predictability, and offers suggestions for further study.

_____. Gates Phonic Word Lists for Teaching Reading. ERIC Document ED 243 087, 1984.

The notion that the letter-sound relationships are highly predictable is strengthened in this document. Moreover, word lists are included that demonstrate areas where the language is phonetically predictable and where it is unpredictable.

Hanna, Paul R., et. al. Phoneme-Grapheme Correspondence as Clues to Spelling Improvement. Washington D.C.: United States Department of Health, Education, and Welfare, 1966.

All but 99 of the 17,310 words included in this carefully developed computerized word list were used as the basis for the word list found in the present study.

Otto, Wayne. "Practice Makes Perfect: Always _____, Sometimes _____, Never _____." Journal of Reading, (November, 1985), 188-191.

Otto, who was cited in the present report, generally favors the use of repeated readings as a technique for achieving fluency. However, he cautions that additional research is needed for verifying its effectiveness as a

teaching technique. (Compare this with the article of Samuels annotated below).

Samuels, S. Jay. "The Method of Repeated Readings." The Reading Teacher, (January, 1979), 403-408.

In addition to providing a historical background for repeated reading and modern applications of the technique, Samuels cites research studies that he and others conducted which support the value of using repeated reading techniques for developing fluency.

Smith, Frank. Understanding Reading, 2nd edition. Holt, Rinehart and Winston, 1978.

The present author's ideas about substituting word lists for phonic generalizations were drawn in part from Frank Smith's ideas that "the easiest way to learn a phonic rule is to learn a few words that exemplify it...." (p. 147), and that "by acquiring an extensive 'sight vocabulary' of immediately identifiable words, children are able to understand, remember, and utilize phonic rules and other mediated identification strategies" (p. 149).

Thorndike, Edward E. and Irving Lorge. The Teacher's Word Book of 30,000 Words. New York: Teacher's College Press, 1944.

Thorndike and Lorge provided the original list of words that was used as a basis for the development of the Stanford word list noted above.

Appendix 1

PARAMETERS FOR THE DATA PRESENTED IN THIS REPORT

The present report, which was based upon 17,211 words drawn from 17,310 words found in the Stanford word list, was conducted using the following parameters:

1. If more than one occurrence of a particular letter or letter combination was found in a word, only the first letter or letter combination was considered.

2. A letter or letter combination was considered to be predictable if a minimum of 75 percent of its occurrences were represented by a maximum of two sound relationships, or, in the case of the single vowels, three sound relationships.

3. The single vowels a, e, i, o, and u were considered for analysis in single vowel categories providing they were neither immediately preceded by one of the five major vowels nor immediately followed by an r.

4. The single vowel y was considered for analysis providing it was neither immediately preceded by one of the five major vowels nor immediately followed by r.

5. The vowels found in a final Vowel-Consonant-e pattern or an inflection of this pattern were excluded from single vowel analysis (i.e., the vowels in the word come and the letter o in coming were not considered as single vowels).

6. The letter i was excluded from analysis if it replaced a y in an inflected word.

7. The final single vowels in single vowel-r-e and the adjacent vowel combinations immediately followed by an r were excluded from analysis (i.e., the vowels immediately preceding r in care and clear were left unexamined).

8. No analysis was made of more than two vowels in juxtaposition (i.e., the vowel pair ou in the word tedious was left unexamined as a vowel pair).

9. Only the vowel pairs that occurred a minimum of a hundred times in the 17,211 word list were examined.

10. Adjacent consonants which could visually pass as consonant di/trigraphs, though not such, were treated as if they were di/trigraph exceptions (i.e., the letters ng in the word engage were treated as if they formed an unpredictable consonant digraph).

Appendix 2

SELECTED CHILDREN'S BOOKS

The following list includes Caldecott and Newbery notable and award winning books that have readabilities from the first through the sixth grades. In addition, the list includes books with first and second grade readabilities that are found in the Random House Beginner Books, Harper Early I Can Read, and Harper I Can Read collections. The readabilities listed for each book are those listed in the Follett Book Catalogue.

Random House Beginner Books

Grade 1

Are You My Mother? Eastman (1.5)
Go, Dog, Go! Eastman (1.4)
Hop on Pop, Suess (1.4)
Little Black, as Pony, Farley (1.7)
One Fish, Two Fish, Red Fish, Blue Fish, Suess (1.9)
Put Me in the Zoo, Lopshire (1.4)
Robert, the Rose Horse, Heilbroner (1.7)
Snow, McKie (1.9)
Why I Built the Boogle House, Palmer (1.9)

Grade 2

Bears' Christmas, Berenstain (2.1)
Bears' Picnic, Berenstain (2.7)
Because a Little Bug Went Ka-Choo, Stone (2.3)
Berenstain Bears and the Missing Dinosaur Bone, Berenstain (2.9)
Best Nest, Eastman (2.5)
Big Ball of String, Holland (2.2)
Big Jump, Elkin (2.9)
Book of Animal Riddles, Cerf (2.1)
Book of Riddles, Cerf (2.1)
Cat in the Hat, Seuss (2.4)
Cat in the Hat Comes Back, Suess (2.9)
Come Over to My House, LeSieg (2.6)
Cowboy Andy, Chandler (2.1)

Digging-Est Dog, Perkins (2.6)
Fish Out of Water, Palmer (2.3)
Fly Went By, McClintock (2.5)
Fox in Socks, Seuss (2.6)
Green Eggs and Ham, Suess (2.2)
I Can Read With My Eyes Shut! Suess (2.4)
I Was Kissed by a Seal at the Zoo, Palmer (2.7)
It's Not Easy Being a Bunny, Sadler (2.9)
Little Black Goes to the Circus, Farley (2.4)
Look out for Pirates, Vinton (2.5)
More Riddles, Cerf (2.1)
Oh, The Things You Can Think! Seuss (2.0)
Please Try to Remember the First of October, LeSieg (2.1)
Sam and the Firefly, Eastman (2.0)
Spooky Riddles, Brown (2.8)
Ten Apples up on Top! LeSieg (2.0)
Tubby and the Lantern, Perkins (2.0)
Very Bad Bunny, Sadler (2.3)
Wacky Wednesday, LeSieg (2.2)
What Do Smurfs Do All Day? Peyo (2.7)
You Will Go to the Moon, Freeman (2.7)

Harper Early I Can Read

Grade 1

Addie Meets Max, Robins (1.7)
And I Mean It, Stanley, Bonsall (1.5)
Cat and Dog, Minarik (1.6)
Come and Have Fun, Hurd (1.6)
Day I Had to Play with My Sister, Bonsall (1.4)
Hester the Jester, Shecter (1.9)
Horse in Harry's Room, Hoff (1.7)
Mine's the Best, Bonsall (1.4)
Ottie and the Star, Allen (1.3)
What Have I Got? McClintock (1.7)
Who Will Be My Friends? Hoff (1.7)
Who's Afraid of the Dark? Bonsall (1.6)
Will You Cross Me? Kaye (1.4)

Grade 2

Albert the Albatross, Hoff (2.0)
Dinosaur Time, Parish (2.0)
Hattie Be Quiet, Hattie Be Good, Gackenbach (2.8)
Hattie Rabbit, Gackenbach (2.6)
Little Chick's Big Day, Kwitz (2.5)
Little Chick's Breakfast (2.1)

Little Chick's Story, Kwitz (2.5)
Mother Rabbit's Son Tom, Gackenbach (2.4)
Santa's Moose, Hoff (2.7)
Thunderhoof, Hoff (2.2)
Walpole, Hoff (2.6)

Harper I Can Read

Grade 1

All of Our Noses Are Here, and Other Noodle Tales, Schwartz (1.7)
Buster Loves Buttons! Manushkin (1.6)
Little Chief, Hoff (1.7)
Little Runner of the Longhouse, Baker (1.9)
No Funny Business, Hurd (1.9)
Sammy the Seal, Hoff (1.8)
Story of Bentley Beaver, Sharmat (1.9)
Surprises (1.8)
Who's a Pest? Bonsall (1.9)

Grade 2

Bargain for Francis, Hoban (2.1)
Bell Ringer and the Pirates, Coerr (2.9)
Big Balloon Race, Coerr (2.9)
Bony, Zweifel (2.5)
Cats Are Good Company, Langshoff (2.9)
Chester, Hoff (2.1)
Danny and the Dinosaur, Hoff (2.7)
Doctors and Nurses: What Do They Do? Green (2.1)
Emmitt's Pig, Satolz (2.4)
Fire Cat, Averill (2.2)
Grasshopper on the Read, Lovbel (2.4)
Grizzwold, Hoff (2.6)
Happy Birthday Present, Heibroner (2.4)
Happy Jack, Carrick (2.4)
Hattie, Tom, and the Chicken Witch, Gackenbach (2.0)
I Am Better Than You! Lopshire (2.6)
In a Dark, Dark Room and Other Scary Stories, Schwartz (2.3)
It's Me, Hippo! Thaler (2.5)
Julius, Hoff (2.7)
Last One Home Is a Green Pig, Hurd (2.4)
Laziest Robot in Zone One, Hoban (2.8)
Little Witch and the Riddle, Degen 2.4)
Moke and Poki in the Rain Forest, Funai (2.5)
Mooch the Messy, Sharmat (2.7)
Morris Goes to School, Wiseman (2.1)

Mouse Soup, Lobel (2.2)
Mouse Tales, Lobel (2.6)
Mr. Pig and Family, Hoban (2.2)
Mr. Tod's Trap, Carrick (2.8)
No Fighting, No Biting, Minarik (2.9)
No More Monsters for Me! Parrish (2.7)
Oink and Pearl, Chorao (2.5)
Okay, Good Dog, Landshoff (2.6)
Oliver, Hoff (2.5)
Ootah's Lucky Day, Parish (2.4)
Oscar Otter, Benchley (2.4)
Owl at Home, Lobel (2.5)
Pelly and Peak, Wittman (2.4)
Perfect Christmas Picture, Manushkin (2.4)
Picture for Harold's Room, Hohnson (2.3)
Piggle, Bonsall (2.5)
Plenty of Pelly and Peak, Wittman (2.6)
Rat is Dead and Ant is Sad, Baker (2.2)
Ready-Set-Robot, Hoban (2.9)
Red Fox and His Canoe, Benchley (2.8)
Running Owl the Hunter, Benchley (2.5)
Secret Three, Myrick (2.6)
Small Pig, Lobel (2.0)
Soldiers and Sailors: What Do They Do? Green (2.5)
Spooky Tricks, Wyler (2.7)
Stanley, Hoff (2.2)
Stop, Stop, Hurd (2.0)
Tell Me Some More, Bonsall (2.1)
Ten Copycats in a Boat, and Other Riddles, Schwartz (2.4)
There is a Carrot in My Ear, and Other Noodle Tales, Schwartz (2.4)
This is the House Where Jack Lives, Heilbroner (2.2)
Three to Get Ready, Boegehold (2.0)
Too Many Babas, Croll (2.9)
Twelve Bells for Santa, Bonsall (2.4)
What Do They Do? Policemen and Firemen, Greene (2.1)
What Spot? Bonsall (2.3)

Caldecott Award Winners

Grade 2

Frog Went a Courtin', Langstaff (2.7)
Tree Is Nice, Udry (2.3)

Grade 3

Abraham Lincoln, D Aulaire (3.9)

Always Room for One More, Nic Leodha (3.9)
Arrow to the Sun: A Pueblo Indian Tale, McDermott (3.4)
Big Snow, Hadeer (3.2)
Biggest Bear, Ward (3.4)
Chanticleer and the Fox, Chaucer (3.8)
Cinderella, Brown,(3.0)
Drummer Hoff, Emberley (3.0)
Duffy and the Devil, Zemach (3.4)
Egg Tree, Milhous (3.0)
Finders Keepers, Lipkind (3.9)
Funny Little Woman, Mousel (3.5)
Glorious Flight, Provensen (3.2)
Little House, Burton (3.8)
Little Island, MacDonald (3.5)
Madelines Rescue, Bemelmans (3.3)
May I Bring a Friend? DeRegniers (3.2)
Nine Days to Christmas, Ets (3.8)
Once a Mouse, Brown (3.4)
One Fine Day, Hogrogian (3.4)
Ox Cart Man, Hall (3.7)
Prayer for a Child, Field (3.3)
Rooster Crows, Petersham (3.4)
Sam Bangs and Moonshine, Ness (3.8)
Shadow, Cendrars (3.7)
Snowy Day, Keats (3.2)
Song of the Swallows, Politi (3.6)
Story a Story, Haley (3.4)
Sylvester and the Magic Pebble, Steig (3.6)
Time of Wonder, McCloskey (3.5)
Why Mosquitoes Buzz in People's Ears, Aardema (3.8)

Grade 4

Ashanti to Zulu African Traditions, Musgrove (4.0)
Baboushka and the Three Kings, Robbins (4.0)
Fool of the World and the Flying Ship, Ransome (4.8)
Girl Who Loved Wild Horses, Gobile (4.7)
Jumanji, Allsburg (4.4)
Make Way for Ducklings, McCloskey (4.2)
Many Moons, Turber (4.1)
Mei Li, Handforth (4.3)
Saint George and the Dragon, Hodges (4.0)
They Were Strong and Good, Lawsoon (4.8)
Where the Wild Things Are, Sendak (4.4)

Grade 5

Fables, Lobel (5.0)

Caldecott Honor Books

Grade 1

Happy Day, Krauss (1.5)

Grade 2

All Falling Down, Zion (2.4)
Ten, Nine, Eight, Bang (2.2)
Ape in a Cape: An Alphabet of Odd Animals, Eichenberg (2.8)
Blueberries for Sal, McCloskey (2.7)
Child's Good Night Book, Brown (2.6)
Crow Boy, Yashima (2.9)
Freight Train, Crews (2.2)
Frog and Toad Are Friends, Lobel (2.4)
Goggles! Keats (2.7)
Just Me, Ets (2.4)
Little Bear's Visit, Minarik (2.7)
Moon Jumpers, Ufry (2.6)
On Market Street, Lobel (2.8)
Play with Me, Ets (2.1)
Treasure, Shuevitz (2.8)

Grade 3

Alexander and the Wind-up Mouse, Lionni, (3.1)
Amazing Bone, Steig (3.8)
Anansi the Spider, McDermott (3.2)
Andy and the Lion, Daughtery (3.5)
Angry Moon, Sleater (3.9)
April's Kittens, Newbery (3.3)
Barkis, Newbery (3.4)
Bartholomew and the Oobleck, Seuss (3.7)
Ben's Trumpet, Isadora (3.6)
Chair for My Mother, Williams (3.8)
Desert if Theirs, Baylor (3.4)
Emperor and the Kite, Yolen (3.9)
Fox Went Out on a Chilly Night, Spier (3.8)
Fredrick, Lionni (3.8)
Golem, McDermott (3.1)
Hide and Seek Frog, Tresselt (3.9)
Hildidid's Night, Ryan (3.3)
Hosie's Alphabet, Baskin (3.5)
If I Ran the Zoo, Seuss (3.8)
In the Forest, Ets (3.6)
Jambo Means Hello, Feelings (3.6)
Journey Cake, Sawyer (3.0)

Judge, an Untrue Tale, Zemach (3.1)
Little Red Riding Hood, Hyman (3.3)
Madeline, Bemelmans (3.2)
McElligot's Pool, Suess (3.7)
Mice Twice, Low (3.1)
Moja Means One, Feelings (3.0)
Mr. Rabbit and the Lovely Present, Zolotow (3.1)
Nothing at All, Gag (3.6)
One Morning in Maine, McCloskey (3.7)
Outside Over There, Sendak (3.6)
Pedro, the Angel of Olivera Street, Politi (3.8)
Pocketful of Cricket, Caudill (3.4)
Rain Drop Splash, Tresselt (3.2)
Rain Makes Applesauce, Scheer (3.1)
Stone Soup, Brown (3.2)
Swimmy, Lionni (3.0)
Three Jovial Huntsmen, Jeffers (3.5)
My Friend, Obadiah, Turkle (3.5)
Umbrella, Yashima (3.2)
Very Special House, Krauss (3.1)
Way to Start a Day, Baylor (3.7)
What Do You Say, Dear? Joslin (3.9)
When Clay Sings, Baylor (3.1)
When I Was Young in the Mountains, Rylant (3.7)
Why the Sun and the Moon Live in the Sky, Dayrell (3.4)

Grade 4

Bremen-Town Musicians, Plume (4.6)
Contest, Hogrogian (4.9)
Fish for Supper, Goffstein (4.3)
Five Little Monkeys, Kepes (4.0)
Garden of Abdul Gasazi, Van Allsburg (4.7)
Henry--Fisherman, Brown (4.5)
Houses from the Sea, Goudey (4.3)
It Could Always Be Words, Zemach (4.2)
My Mother is the Most Beautiful Woman in the World, Reyher (4.3)
Paddle-to-the-Sea, Holling (4.5)
Puss in Boots, Perrault (4.0)
Snow-White and the Seven Dwarfs, Gag (4.4)
Storm Book, Zolotow (4.3)
Strega Nona, De Paola (4.4)
Visit to William Blake's Inn, Willard (4.9)
Where the Buffaloes Begin, Baker (4.0)

Grade 5

In the Night Kitchen, Sendeck (5.0)

Marguerite De Angeli's Book of Nursery and Mother Goose Rhymes, De Angeli (5.2)

Grade 6

America's Ethan Allen, Holbrook (6.3)
Castle, Macaulay (6.0)
Cathedral, Macaulay (6.1)

Newbery Award Winners

Grade 4

Bridge to Terabithia, Paterson (4.8)
Caddie Woodlawn, Brink (4.7)
Carry on Mr. Bowditch, Latham (4.7)
Dear Mr. Henshaw, Cleary (4.4)
King of the Wild, Henry (4.9)
Miss Hickory, Bailey (4.8)
Visit to William Blakes Inn, Willard (4.9)

Grade 5

Amos Fortune: Free Man, Yates (5.0)
And Now Miguel, Krumgold (5.2)
Bronze Bow, Speare (5.6)
Call it Courage, Sperry (5.5)
Dark Frigate, Hawes (5.5)
Dicey's Song, Voigt (5.8)
Door in the Wall, De Angeli (5.4)
From the Mixed Up Files of Mrs. Basil E. Frankweiler, Koningsburg (5.7)
Gathering of Days, Blos (5.7)
Gay Neck, Mukerji (5.5)
Ginger Pye, Estes (5.8)
Grey King, Cooper (5.1)
High King, Alexander (5.9)
Hitty: Her First Hurdred Years, Field (5.5)
It's Like This, Cat, Neville (5.4)
Julie of the Wolves, George (5.6)
M.C. Higgins the Great, Hamilton (5.7)
Mrs. Frisby and the Rats of Nimh, O'Brien (5.8)
Onion John, Krumgold (5.1)
Rabbit Hill, Lawson (5.4)
Rifles for Watie, Keith (5.4)
Roller Skates, Sawyer (5.0)
Secret of the Andies, Clark (5.2)

Shadow of a Bull, Wojciechow (5.9)
Shen of the Sea, Chrisman (5.0)
Slave Dancer, Fox (5.5)
Sounder, Armstrong (5.2)
Strawberry Girl, Lenski (5.2)
Summer of the Swans, Byars (5.0)
Trumpeter of Krakow, Kelly (5.5)
Twenty One Balloons, Du Bois (5.7)
Waterless Mountain, Armer (5.2)
Wheel on the School, Dehong (5.4)
White Stag, Seredy (5.7)
Witch of Blackbird Pond, Speare (5.8)
Wrinkle in Time, L'Engle (5.5)

Grade 6

Adam of the Road, Gray (6.9)
Cat Who Went to Heaven, Coatsworth (6.2)
Dorby, Shannon (6.2)
I, Juan De Pareja, De Trevino (6.4)
Island of the Blue Dolphins, O'Dell (6.1)
Jacob I Have Loved, Paterson (6.5)
Johnny Termain, Forbes (6.3)
Miracles on Maple Hill, Sorensen (6.9)
Roll of Thunder, Hear My Cry, Taylor (6.2)
Smoky the Cowhorse, James (6.6)
Tales from Silver Lands, Finger (6.1)
Thimble Summer, Enright (6.0)
Up a Road Slowly, Hunt (6.0)
Westing Game, Taskin (6.1)
Young Fu of the Upper Yangtzee, Lewis (6.0)

Newbery Honor Books

Grade 2

ABC Bunny, Gag, (2.7)
Courage of Sarah Noble, Dalgliesh (2.6)
Frog and Toad Together, Lobel (2.3)

Grade 3

Annie and the Old One, Miles (3.7)
Bears on Hemlock Mountain, Dalgliesh (3.7)
Doctor De Soto, Steig (3.7)
Millions of Cats, Gag (3.6)

Grade 4

Cricket in Times Square, Selden (4.7)
Good Master, Seredy (4.7)
Jennifer, Hecate, Macbeth, William McKinley, and Me, Elizabeth, Koningsburg (4.9)
Kneeknock Rise, Babbitt (4.3)
Little House in the Big Woods, Wilder (4.0)
Little Town on the Prarie, Wilder (4.2)
Long Winter, Wilder (4.4)
Hundred Penny Box, Mathis (4.5)
Minn of the Mississippi, Holling (4.7)
Misty of Chincoteague, Henry (4.7)
Shadrach, De Jong (4.8)
Sugaring Time, Lasky (4.8)
Wish Giver, Brittain (4.7)

Grade 5

Along Came a Dog, De Jong (5.0)
By the Shores of Silver Lake, Wilder (5.1)
Charlotte's Web, White (5.0)
Dark is Rising, Cooper (5.9)
Dragonwings, Yep (5.5)
Egypt Game, Snyder (5.9)
Figgs and Phantoms, Raskin (5.5)
Fledging, Langton (5.8)
Great Gilly Hopkins, Paterson (5.3)
Headless Cupid, Snyder (5.7)
Witches of Worm, Snyder 5.4)
Hurry Home, Candy, De Jong (5.0)
Justin Morgan Had a Horse, Henry (5.0)
My Brother Sam is Dead, Collier (5.8)
Noonday Friends, Strolz (5.3)
On the Banks of Plum Creek, Wilder (5.0)
Philip Hall Likes Me, Green (5.0)
Planet of Junior Brown, Hamilton (5.5)
Ramona Quimby, Age 8, Cleary (5.7)
Sign of the Beaver, Speare (5.0)
Sing Down the Moon, O'Dell (5.3)
Sweet Whispers, Brother Rush, Hamilton (5.8)
These Happy Golden Years, Wilder (5.1)
Tumbs of Atuan, LeGuin (5.8)
Upon the Head of the Goat, Siegal (5.6)
When Shiemiel Went to Warsaw and Other Stories, Singer (5.6)

Grade 6

Abel's Island, Steig, (6.9)

Anpao, Highwater (6.2)
Black Caldron, Alexander (6.4)
Black Pearl, O'Dell (6.4).
Blue Sword, McKinley (6.0).
Castle, Macauley (6.0)
Graven Images, Fleischman (6.9)
Homesick, My Own Story, Fritz (6.1)
Middle Moffat, Estes (6.0)
Perilous Gard, Pope (6.1)
Ring of Endless Light, L'Engle (6.1)
Solitary Blue, Voight (6.9)
String in the Harp, Atheneum (6.1)